

DEPARTMENT OF PLANNING
STAFF REPORT

PLANNING COMMISSION PUBLIC HEARING

DATE OF HEARING: July 16, 2007

**SPEX 2006-0044 & CMPT 2006-0009, LOUDOUN COUNTY SCHOOLS – GRUBB
PROPERTY**

DECISION DEADLINE: Extended to November 12, 2007

ELECTION DISTRICT: Blue Ridge PLANNER: Michael “Miguel” Salinas

EXECUTIVE SUMMARY

Loudoun County Public Schools (LCPS), the applicant, is requesting approval of a Special Exception and a Commission Permit (the “Grubb Property”) under the Revised 1993 Zoning Ordinance to permit an elementary school and middle school on three contiguous properties (the “subject site”) of approximately 103.32 acres. More specifically, LCPS is proposing a 91,000 sq. ft. elementary school (ES-25) and 168,000 sq. ft. middle school (MS-10) with a projected enrollment of 875 and 1,350 students, respectively, plus associated recreational facilities and utilities. Additional facilities include one softball field and one soccer field associated with ES-25, one softball field and two soccer fields associated with MS-10, and on-site water and wastewater treatment facilities. The schools are intended to serve students located north of Route 9 (Charlestown Pike). ES-25 and MS-10 are projected to come on-line by 2012 and 2015, respectively.

The subject site is zoned Agricultural Rural-1 (AR-1) and is located east of the town of Hillsboro on the east side of Purcellville Road (Route 611), approximately 1 mile north of Charlestown Pike (Route 9), at the western terminus of John Wolford Road (Route 694). See the Vicinity Map below for the subject site’s exact location. The subject site is governed by the policies of the Revised General Plan and is located in the northern tier of the Rural Policy Area and planned for rural economy uses and limited residential development at a base density of one dwelling unit per 20 acres.

RECOMMENDATIONS

Staff recommends that the Planning Commission forward this application to committee for further discussion of the outstanding issues identified in this report, which primarily relate to conformance to the Revised General Plan as it pertains to the siting of new school facilities.

SUGGESTED MOTIONS

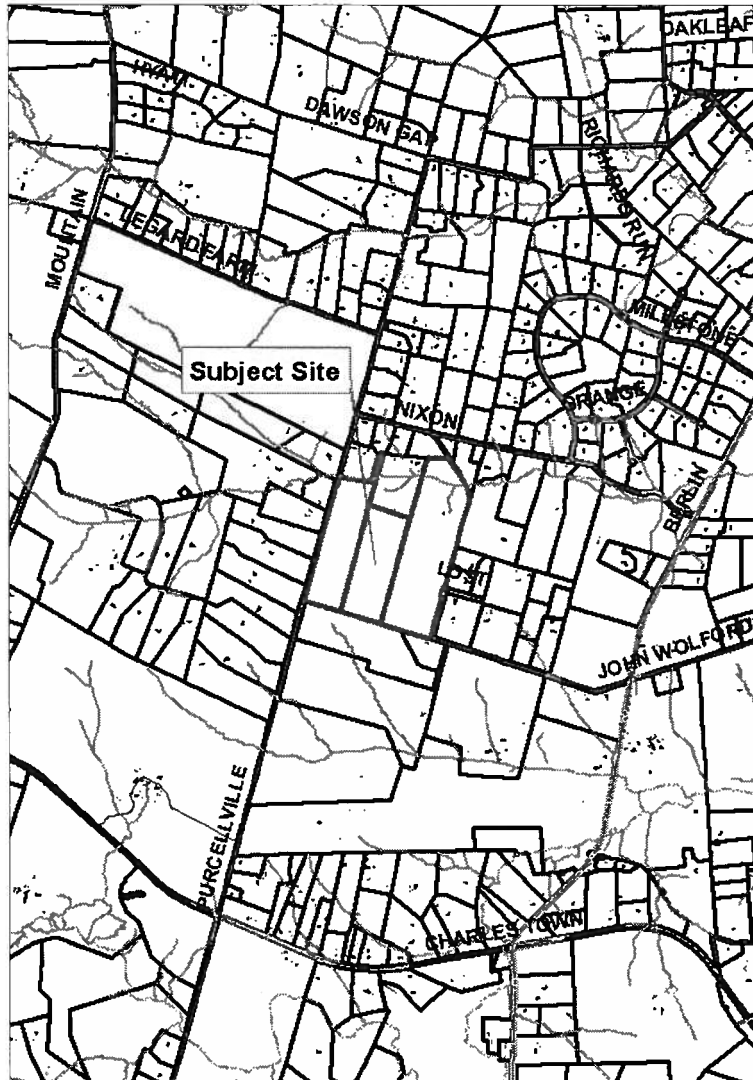
1. I move that the Planning Commission forward SPEX 2006-0044 and CMPT 2006-0009, Loudoun County Public Schools – Grubb Property, to committee for further discussion of the issues.

Or

2. I move an alternate motion.

VICINITY MAP

LOUDOUN COUNTY SCHOOLS-GRUBB PROPERTY



Directions: From Leesburg: Route 7 west to Route 9 (Charlestown Pike), west to Route 287 (Berlin Turnpike), north on Route 287 to Route 694 (John Wolford Road), then west on Route 694. The property lies adjacent to the west side of Route 694 and adjacent to the east side of Route 611 (Purcellville Road).

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I. APPLICATION INFORMATION

APPLICANT: Loudoun County Public Schools
Sam Adamo and Sara Howard-O'Brien
Planning and Legislative Services
21000 Education Court
Ashburn, Virginia 20148
(571) 252-1156

REPRESENTATIVES: Bowman Consulting Group, Ltd.
Mark Baker
101 South Street, SE
Leesburg, Virginia 20175

PROPOSAL: A Special Exception and Commission Permit to allow an elementary school and middle school in the AR-1 zoning district.

LOCATION: East of the town of Hillsboro on the east side of Purcellville Road (Route 611), approximately 1 mile north of Charlestown Pike (Route 9), at the western terminus of John Wolford Road (Route 694)

TAX MAP/PARCEL: Tax Map #s /26/////////29/, /26/////////30/, and /26/////////35/ MCPI: 447-48-7740, MCPI 447-39-2786, and MCPI 447-40-1217 respectively

ZONING: AR-1

RESIDENTIAL UNITS: N/A

NON-RES. FLOOR AREA: 261,000 Square Feet plus Associated Recreational Facilities and Utilities

SURROUNDING LAND USES/ZONING:

NORTH	Residential	AR-1
SOUTH	Agricultural/Vacant	AR-1
EAST	Residential	AR-1
WEST	Residential	AR-1

ELECTION DISTRICT: Blue Ridge

II. SUMMARY	
Referral Agency or Topic Area	<i>Issues Examined and Status</i>
Community Planning	School siting policies; LCPS process evaluation and criteria; compatibility with surrounding land uses; paving and upgrading of rural roads; accessibility; lack of conformance to the <u>Revised General Plan</u> - Outstanding issues.
Zoning Administration	Conformance to the <u>Revised 1993 Zoning Ordinance</u> ; Scenic Creek Valley Buffer; phasing; overall square footage; screening and buffering; rights-of-way - No outstanding issues.
Environmental	Stormwater management; stream corridor resources; water conservation including geothermal; reforestation; tree save areas and specimen trees; detailed floodplain study – Outstanding issues.
Transportation	Traffic study analysis; on-site and off-site road improvements and phasing; rights-of-way; site access from John Wolford Road; emergency access; cul-de-sac at the terminus of John Wolford Road – No outstanding issues.
VDOT	Traffic study analysis; on-site and offsite road improvements and phasing; rights-of-way; signalization; turn lane design; pavement widths – No outstanding issues.
Health Department	Review of proposed treatment facility designs – No outstanding issues.
Parks, Recreation & Community Affairs	Review of SPEX Plat and associated recreational facilities; requests consideration of additional amenities for ES-25, including playgrounds and tracks; opportunities for shared-use facilities - Outstanding issues.
Fire and Rescue	Configuration of semicircle drive adjacent to ES-25; emergency access; response times – No outstanding issues.
Town of Purcellville	Timing of SPEX and CMPT approval, opportunity to utilize site for the placement of a high school; review of the TIA - No outstanding issues.
Disclosure of Real Parties in Interest	Received and Attached, June 11, 2007

III. CONCLUSIONS

1. The proposed Special Exception and Commission Permit are not consistent with the Revised General Plan. The subject site is not located within or immediately adjacent to the existing Villages, Towns, and Joint Land Management Areas (JLMA), which are part of a larger growth management strategy for western Loudoun County that continues to direct and support concentrated residential, non-residential, public infrastructure, and public facility investments at these historical population centers and to minimize negative impacts on existing and preferred land use patterns, neighborhood traffic, student commute times, and commuter options for students.

2. The proposed schools, with a combined student/staff population of over 2,400 individuals, are not consistent with planned land uses of the Revised General Plan that call for low-density residential at a base density of 1 dwelling unit per 20 acres and/or for rural economy uses. The proposed schools are also not compatible with existing land uses, including low-density residential to the north, east and west and low-density residential and agriculture to the south.
3. The proposed special exception does not contribute to or promote the welfare or convenience of the public. The subject site is located within an area that is not planned for the road infrastructure necessary to adequately serve schools. Paving and upgrading of these roads would not be consistent with the policies of both the Revised General Plan and the Countywide Transportation Plan for rural, unpaved roads.
4. The traffic generated by the schools will not adequately be served by roads, pedestrian connections and other transportation services. The Revised General Plan's land use pattern in the Rural Policy Area supports lower densities in part to mitigate the additional costs that higher traffic volumes incur. Furthermore, the selection of a school site is in direct conflict with the locational policies contained within the Revised General Plan and the Bike/Ped Plan that call for safe routes to school, including linking public schools to adjacent neighborhoods by sidewalks or trails on both sides of roadways and crosswalks, and where possible, linked to greenways or trails, and providing greater commute options for students to walk or bike to school.

IV. CONDITIONS OF APPROVAL

Should this application be forwarded with a recommendation of approval, staff recommends the following conditions below. LCPS is currently reviewing the list of conditions for agreement.

1. **Special Exception Plat.** The property shall be developed in substantial conformance with the Special Exception Plat, prepared by Bowman Consulting, dated December 18, 2006 and revised through June 14, 2007. Approval of the Special Exception for the two school facilities does not relieve the applicant of any Zoning Ordinance, Codified Ordinance, or any other requirement.
2. **Lot Consolidation.** Lot consolidation of the three parcels shall be required prior to or in conjunction with site plan submission approval and prior to the issuance of the first zoning permit.
3. **Overall Square Footage.** The square footage of the elementary school and middle school shall contain a cumulative 261,000 square feet. Associated water and wastewater treatment facilities shall be a maximum 44,000 SF. In no case shall the overall square footage of all structures on the site exceed the maximum lot coverage allowed in the AR-1 zoning district.

4. **Phasing.** Development of the site shall reflect the phasing sequence as depicted on the SPEX Plat. The applicant shall size and construct the water and wastewater facilities, along with the stormwater management pond, in Phase 1 to safely and adequately service both ES-25 and MS-10.
5. **Water and Wastewater.** On-site water and sewer treatment facilities shall only serve ES-25 and MS-10. The applicant shall submit required studies to the Loudoun County Health Department for water and wastewater treatment facility designs prior to site plan approval. Any corrections or additions requested at the State or Local level for water and wastewater treatment facility designs shall be completed prior to site plan approval. All GMP 101 requirements related to drainfields shall be completed prior to permit issuance. Water and wastewater treatment facilities shall operate in accordance with the conditions attached to permits issued by the Loudoun County Health Department.
6. **Transportation Improvements.** Transportation improvements shall be in coordination with the phasing plan as depicted on the SPEX Plat. The following improvements are to be installed and accepted by the Virginia Department of Transportation (VDOT) prior to the opening of the elementary school:
 - A. Provide the right-of-way as needed and upgrade Route 694 to provide 11-foot asphalt travel lanes and adequate shoulders/ditches from Route 287 to the northern property line of the school site, or the terminus of the public street;
 - B. Construct a northbound left turn lane, a southbound right turn lane, and an eastbound right turn lane at the intersection of Route 694 and Route 287;
 - C. Construct a cul-de-sac turn around at the end of Route 694;
 - D. Construct a northbound left turn lane and a southbound left turn lane at the intersection of Route 693 and Route 287; and
 - E. Provide signalization at the intersection of Route 694 and Route 287, when warranted and contingent upon VDOT approval. LCPS shall be responsible for the costs related to the warrant study.

The following improvements are to be installed and accepted by VDOT prior to the opening of the middle school:

- F. Provide the right-of-way as needed and upgrade Route 611 to provide 11 foot asphalt travel lanes with adequate shoulders/ditches from Route 9 to the northern boundary of the school site;
 - G. Construct an eastbound left turn lane, a westbound right turn lane, and a southbound right turn lane at the intersection of Route 611 and Route 9; and
 - H. Provide signalization at the intersection of Route 611 and Route 9 when warranted and contingent upon VDOT approval. LCPS shall be responsible for the costs related to the warrant study.
7. **Emergency Entrance.** Access to the site from Route 611 will be restricted to emergency access only until all road improvements are installed and accepted by VDOT prior to the opening of MS-10.

8. **Signage & Lighting.** Signage and lighting will conform to Section 5-1200 and Section 5-1500 of the Revised 1993 Loudoun County Zoning Ordinance and as necessary for safety and security. The recreational fields shall not be lighted. Site building and parking lot lighting shall be designed and constructed with cut-off and fully-shielded fixtures so that light is directed inward and downward toward the interior of the property, respectively, and away from adjacent roads and properties.
9. **Noise.** The athletic fields shall not include the installation of outdoor public address systems.
10. **Buffering and Screening.** A 15-foot wide enhanced buffer, in addition to the required Type 2 buffer along all site boundaries, shall be provided along the entire western boundary of the site, excluding the boundary interrupted by the Route 611 site access. Screening and buffering shall consist of a combination of fencing and landscaping and shall include a minimum of 6 evergreen trees per 100 linear feet at a planting height of 6 to 8 feet. Additional enhanced buffers shall be provided as depicted on the SPEX Plat.
11. **Reforestation of River and Stream Corridors.** Prior to approval of the first submitted site plan, LCPS shall work with Loudoun County's Department of Building and Development on reforestation measures for the river and stream corridor, as shown on the SPEX Plat, to prevent stream pollution and protect the headwaters of the Catoctin Creek. Such reforestation measures shall be to the satisfaction of the County and a plan for restoration measures shall be submitted to the County prior to site plan approval.
12. **Water Conservation.** LCPS shall achieve reduced water usage within the range of 20-40% below current design assumptions for the two school facilities, consistent with the recommended range by the Leadership in Energy and Environmental Design (LEED) for Schools 2007 checklist, as amended from time to time. LCPS shall install low-flow toilets and no-flow urinals in all bathrooms located within ES-25 and MS-10 prior to the issuance of a Certificate of Occupancy. LCPS may pursue additional water conservation measures, including a rooftop rainfall collection system that may be used in conjunction with irrigation systems.
13. **Stormwater Run-Off.** LCPS shall achieve a minimum 50% phosphorous removal efficiency for all stormwater run-off generated from the site. A stormwater management/best management practices (SWM/BMP) enhanced extended detention facility shall be constructed within the approximate location as depicted on the SPEX Plat. LCPS may utilize other BMP methods, such as infiltration, to treat stormwater run-off from impervious surfaces including parking lots, internal roads and sidewalks.

14. **50-foot Management Buffer.** A 50-foot management buffer shall be provided along the west-east floodplain at the northern portion of the subject property and on both sides of the spring, as depicted on the SPEX Plat. All proposed structures, athletic fields, and the stormwater management pond shall remain outside of the 50-foot management buffer.
15. **Springhouse.** LCPS shall restore the spring house currently located on the site. A structural evaluation conducted by a qualified architectural historian/historical architect shall be conducted prior to the submission and approval of the site plan to determine the extent and type of restoration needed.

V. PROJECT REVIEW

A. Context

Loudoun County Public Schools (LCPS), the applicant, is requesting approval of a Special Exception and a Commission Permit (the "Grubb Property") to allow an elementary school (ES-25) and middle school (MS-10) on three contiguous properties (the "subject site") of approximately 104 acres. The subject site is zoned Agricultural Rural-1 (AR-1) and is located east of the town of Hillsboro on the east side of Purcellville Road (Route 611), approximately 1 mile north of Charlestown Pike (Route 9), at the western terminus of John Wolford Road (Route 694) in the Blue Ridge Election District. LCPS is proposing an approximately 91,000 sq. ft. facility for ES-25 and a 170,000 sq. ft. facility for MS-10 with a projected enrollment of 875 and 1,350 students, respectively. Associated recreational and utility facilities are proposed on the site. The School Board's Adopted FY 2008 through 2012 Capital Improvements Program (CIP) anticipates the opening of ES-25 by the 2012-13 school year and MS-10 by the 2015-16 school year.

Surrounding land uses include low-density single-family residential to the north, east, and west and vacant agricultural land adjacent to the subject site's southern boundary. Properties to the south of Route 694 and west of the Berlin Turnpike (Route 287) include low-density single-family residential and agriculture. Wheatland Estates, a development consisting of 55 single-family residential dwellings, is located approximately 1,000 feet to the northeast.

An unnamed east-west tributary of Catoctin Creek, a major floodplain, moderately steep slopes and forested and emergent wetlands are located along the northern portion of the subject site. A forested wetland is also located at the extreme southwestern portion of the site and is associated with the headwaters of an unnamed tributary of the North Fork of Catoctin Creek. There is minimal forest cover, mostly associated with fence rows, field borders, and a riparian corridor along the east-west tributary. The subject site is encumbered by a 35' permanent Right-Of-Way (ROW) easement along Purcellville Road and a 15' electric and telephone easement along the eastern boundary line. Two abandoned wells exist, along with three structures – a barn and springhouse at the

northeastern portion of the subject site and a shed in the west-central portion. The spring house is associated with a stream that flows northwardly towards the east-west tributary.

LCPS staff have responded to referral comments, met with certain referral agencies including the Virginia Department of Transportation (VDOT) and the Office of Transportation Services (OTS), revised the proposed Special Exception (SPEX) plat and agreed to conditions of approval should the application be forwarded with a recommendation of approval.

B. Summary of Outstanding Issues

Land Use: The location of ES-25 and MS-10 is not in conformance with policies contained within the Revised General Plan related to the siting of new school facilities:

- The subject site is located approximately 3.5 miles from the Town of Hillsboro and 5.3 miles from the Town of Lovettsville. Plan policies call for the location of new school facilities within or immediately adjacent to the existing Villages, Towns, and Joint Land Management Areas (JLMA);
- Plan policies that call for the location of new school facilities within or immediately adjacent to existing Villages, Towns, and JLMA's are part of a larger growth management strategy for western Loudoun County that directs and supports concentrated residential, non-residential, public infrastructure, and public facility investments at these historical population centers. The selection of new school sites outside of areas where the County desires to direct future growth and services could potentially have negative impacts on existing and preferred land use patterns, neighborhood traffic, student commute times, and commuter options for students;
- Directing the majority of public investments, including schools, into currently developed and planned communities facilitates the compact and efficient use of these resources while creating potential opportunities to leverage the capital costs incurred;
- Plan policies support: 1.) New growth primarily directed towards the corporate limits of the Towns, first and foremost, before moving into contiguous designated JLMA's, 2.) Expansion of existing water and sewer facilities that encourages a coordinated development pattern and that furthers the goals and policies of the Revised General Plan, and 3.) The location of public facilities, including schools, within or immediately adjacent to the Towns and the JLMA's, including the Towns of Round Hill, Purcellville, and Hamilton; and
- Existing Villages (including Lucketts, Neersville, Taylorstown, and Waterford) are encouraged to continue as hubs for community activities and new non-residential development, provided they are complementary to and compatible with their existing development patterns.

Furthermore, the proposed schools, with a combined student/staff population of over 2,400 individuals, are also not compatible with planned land uses that call for low-density residential at a base density of 1 dwelling unit per 20 acres and/or for rural economy uses.

The subject site is located within an area surrounded by low-density residential to the north, east and west. Low-density residential and agriculture land lies to the south of the subject site and south of Route 694.

Accessibility: The Revised General Plan's land use pattern in the northern tier of the Rural Policy Area supports lower densities in part to mitigate the additional costs that higher traffic volumes incur. The subject site is located within an area that is not planned for the road infrastructure necessary to adequately serve schools. Paving and upgrading these roads would not be consistent with the policies of both the Revised General Plan and the Countywide Transportation Plan for rural, unpaved roads. The location of ES-25 and MS-10 on the subject site would also exacerbate the background traffic improvements already needed. The selection of the site for ES-25 and MS-10, not located within or immediately adjacent to existing Towns, Villages, and JLMA's, is in direct conflict with the locational policies contained within the Revised General Plan and the Bike/Ped Plan that call for safe routes to school, including linking public schools to adjacent neighborhoods by sidewalks or trails on both sides of roadways and crosswalks, and where possible, to greenways or trails, in order to provide greater commute options for students to walk or bike to school.

Site Selection for New School Facilities in Western Loudoun County: Commission Permits are used to determine if the general location, character, and extent of the proposed school uses are in substantial accord with the Comprehensive Plan. The location of ES-25 and MS-10 is not in conformance with policies contained within the Revised General Plan related to the siting of new school facilities. Staff recommends an alternative site or sites be identified that meet plan policies. If it is determined through a joint planning process between Loudoun County Public Schools and the County that no suitable sites for schools can meet existing plan policies, then a re-evaluation of those policies may be necessary in the context of a Comprehensive Plan Amendment.

C. Overall Analysis

COMPREHENSIVE PLANNING

Land Use. A Commission Permit is requested as part of this application. Commission Permits are used to determine if the general location, character, and extent of the proposed school uses are in substantial accord with the Comprehensive Plan. The growth management, land use, and public facility policies contained within the Revised General Plan provide the basis for evaluating conformity. The major outstanding issue is nonconformance with the policies of the Revised General Plan for the siting of new schools. Specifically, the location of ES-25 and MS-10 on the Grubb property is not consistent with plan policies that call for the location of new public schools within or immediately adjacent to the existing Villages, Towns, and Joint Land Management Areas (JLMA) (Revised General Plan, Policy 8, p. 3-10). Furthermore, the impact of the schools and its combined student/staff population of over 2,400 individuals, is not compatible with the planned land uses for the northern tier of the Rural Policy Area that call for a base

density of 1 dwelling unit per 20 acres and rural economy uses (*Revised General Plan, text, p. 7-7*). The subject site is located within an area surrounded by low-density residential to the north, east and west. Low-density residential and agriculture land lies to the south of the subject site and south of John Wolford Road.

LCPS (the “applicant”) states that the subject site is well-positioned to serve anticipated student growth in western Loudoun County. LCPS states that the Route 7 corridor already contains an established school cluster to serve the existing student population as well as the southern tier of the Rural Policy Area¹. According to LCPS, the existence of the Route 7 school cluster, along with the fact that most of the areas around the Towns have predominantly developed, means that it is likely the highest projections for future student growth will occur north of the Route 7 corridor. Consequently, this is where the next school cluster should be planned. LCPS also notes the difficulty in acquiring sites for new school construction to accommodate the projected student growth when land is not proffered, including rising land prices due to residential and commercial development and a lack of adequate infrastructure².

The policy for the location of new school facilities within or immediately adjacent to the existing Villages, Towns, and Joint Land Management Areas (JLMA) is part of a larger growth management strategy for western Loudoun County that continues to direct and support concentrated residential, non-residential, public infrastructure, and public facility investments at these historical population centers. Five incorporated Towns exist along and north of Route 7. These Towns have developed over the years as the location for employment and public facilities. Directing the majority of public investments, including schools, into currently developed and planned communities facilitates the compact and efficient use of resources (*Revised General Plan, Policy 6, p. 3-4, text, p. 3-6, Policies 1 & 2, p. 9-2, Policy 2, p. 9-7, & Policies 1 & 3, p. 9-8*). Further strengthening this growth management strategy are plan policies that support: 1.) New growth primarily directed towards the corporate limits of the Towns, first and foremost, before moving into contiguous designated JLMA’s, 2.) Expansion of existing water and sewer facilities that encourages a coordinated development pattern and that furthers the goals and policies of the Revised General Plan, and 3.) The location of public facilities, including schools, within or immediately adjacent to the Towns and the JLMA’s, including the Towns of Round Hill, Purcellville, and Hamilton. Likewise, the Revised General Plan encourages existing Villages (including Lucketts, Neersville, Taylorstown, and Waterford) to continue as hubs for community activities and new non-residential development, provided they are complementary to and compatible with their existing development patterns (*Revised General Plan, text, p. 10-1*).

¹ According to the applicant’s Statement of Justification, 57% of the current student population in western Loudoun County resides within one mile of the Route 7 corridor.

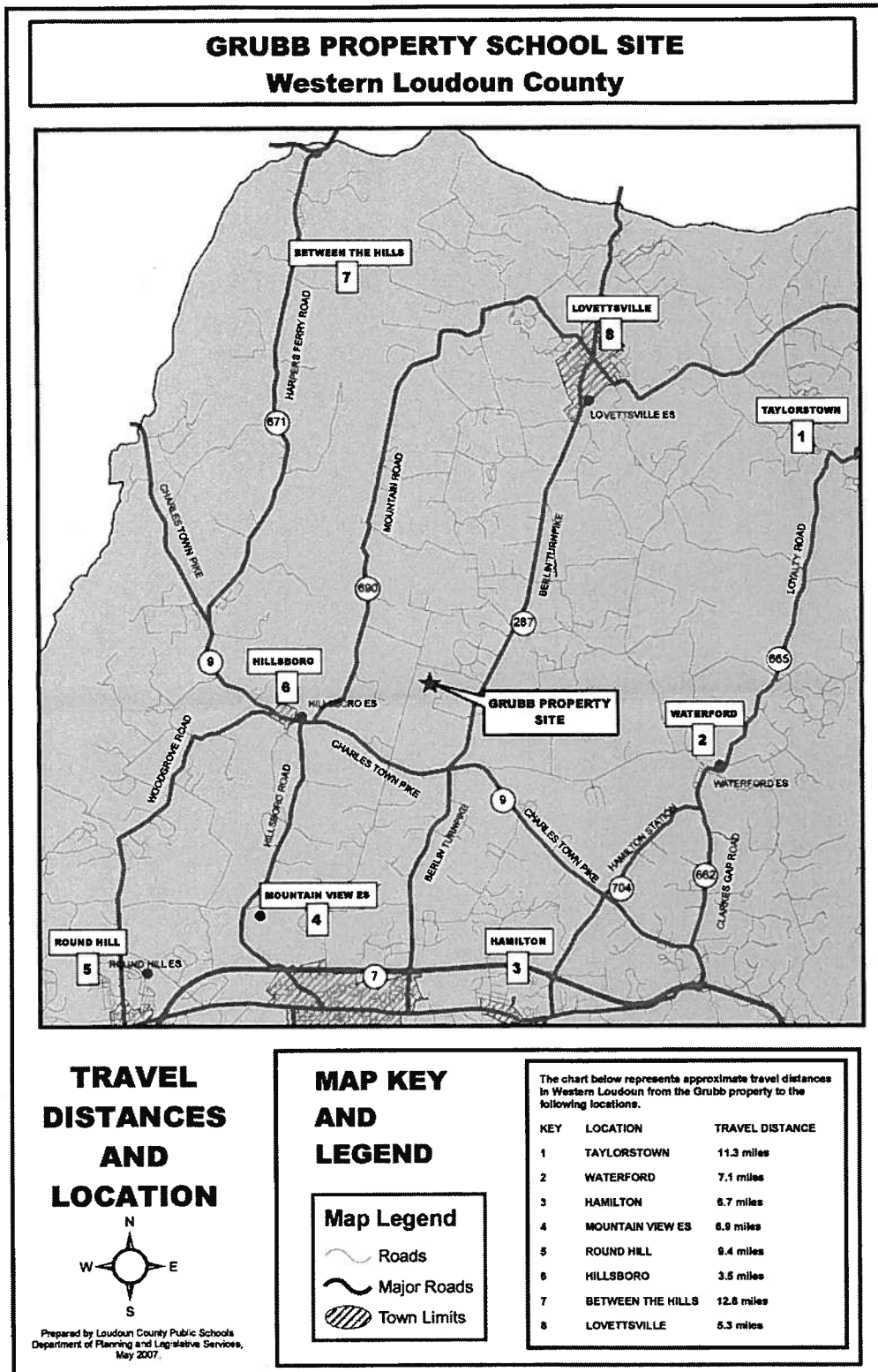
² According to the land acquisition section in the Loudoun County Public School’s School Board Adopted FY 2008 through FY 2012 Capital Improvements Program, most existing schools were built on developer proffered sites dedicated to the school board. These proffered sites have been nearly exhausted and land acquisition is now becoming a necessary strategy for new school sites.

The selection of new school sites outside of areas where the County desires to direct future growth and services could potentially have negative impacts on existing and preferred land use patterns, neighborhood traffic, student commute times, and commuter options for students. For example, Loudoun County has to identify the funds necessary to pay for the infrastructure costs necessary to support new schools. A planning process that does not evaluate multiple sites for each school facility, taking into account the costs of placing new school sites on land without adequate infrastructure, could place too large a burden on taxpayers. Schools far from existing communities or future centers of population growth can also adversely affect student commute times. Conversely, appropriately placed school sites that meet plan policies can provide safe and convenient access for students while becoming focal points and civic anchors for the use of neighborhood and community residents during the evenings and weekends.

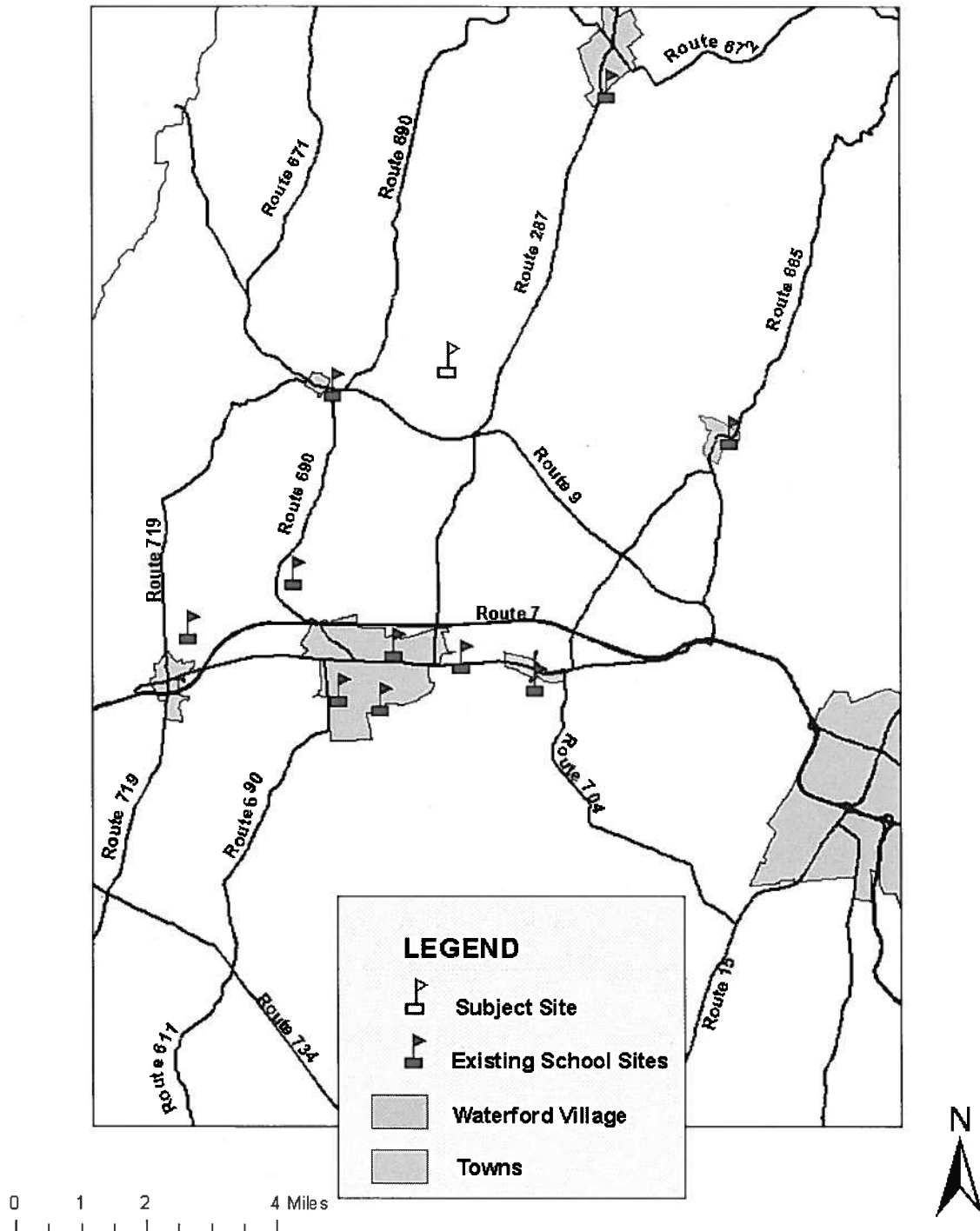
The historical development pattern for school sites has, for the most part, followed plan policies related to the County's growth management strategy - in particular plan policies that call for new school sites located within or adjacent to Towns, Villages or Joint Land Management Areas. Graphic 1, provided by Loudoun County Public Schools, demonstrates the subject property as being 3.5 miles from the Town of Hillsboro and 5.3 miles from the Town of Lovettsville. Graphic 2 on the other hand, which shows the location of existing schools within LCPS's Loudoun Valley Cluster and their relationship to the County's Towns and Villages, demonstrates Loudoun County's historical adherence to county plan policies for the location of new school facilities³.

³ The Graphic excludes Banneker Elementary School located south of the map boundary. Lincoln Elementary School, located south of Route 7, also is not depicted on the map but is located adjacent to Purcellville's JLMA.

GRAPHIC 1:



**GRAPHIC 2: EXISTING SCHOOL SITES -
WESTERN LOUDOUN**



Site Selection for New School Facilities in Western Loudoun County. As stated previously, a Commission Permit is requested as part of this application. Commission Permits are used to determine if the general location, character, and extent of the proposed school uses are in substantial accord with the Comprehensive Plan. The school locational policies contained within the Revised General Plan provide the basis for evaluating conformity.

As mentioned previously, LCPS states that ES-25 and MS-10 are being planned for a site that is central to the anticipated student growth north of Route 9. LCPS also states that: 1.) The Route 7 corridor already contains an established school cluster to serve the existing student population, and 2.) Most of the areas around the Towns have predominantly developed. These facts, according to LCPS, preclude the selection of a site that meets plan policies. LCPS has suggested it is time to recognize that the policy contained within the Revised General Plan that calls for the location of new public schools within or immediately adjacent to existing Villages, Towns, and Joint Land Management Areas (JLMA) "is not in touch with the reality associated with land availability, acquisition, and development."

Student enrollment projections, capital costs related to site acquisition and infrastructure improvements, and land use policies contained within the Revised General Plan are inextricably related. Therefore, the location and design of public facilities, and schools in particular, are of primary importance to the County. The Revised General Plan calls for LCPS to coordinate with the County to identify suitable sites based on the plan's land use and growth policies in concert with the School Board standards and levels of service⁴.

School facilities play a special role in neighborhoods and communities and act as focal points and civic anchors. The selection of sites for new school facilities, along with their design, should be measured against the highest possible standards (Revised General Plan, text, p. 3-6 and Policy 1, p. 3-9). A typical planning process for new school sites could include:

⁴ Staff notes that a Western Schools Task Force was established by the Board of Supervisors in 2007 to explore possible strategies for Western school growth and site selection. Areas of exploration might include school size versus schools costs, school design, clustering, and preferred locations, i.e. in what general geographic areas should schools be sited, what criteria the School Board should use for site selection, and a review of current policies and standards for school siting. The task force members include: two School Board members who represent western Loudoun, two members of the Board of Supervisors who represent western Loudoun, mayors of the incorporated towns, and three western Loudoun residents.

1. Future student population growth to consider schools at the focus of attendance areas (Revised General Plan, Policy 4, p. 3-9);
2. An identification of potential sites; and
3. Site selection criteria that incorporate not only LCPS's standards and level of service, but also the policies contained within the Revised General Plan. Examples of criteria used to measure against potential sites could include:
 - The proximity of the student population to be served and the schools that will be relieved of the overcrowding;
 - The provision of safe and convenient access for students;
 - The ability to maximize walking to the school by students;
 - The relationship between the site and other public facilities;
 - The availability of public water and sewer service;
 - The conditions of the existing roads to serve the site;
 - The potential relationship between the school and the neighboring community; and
 - Possibilities for flexible design (smaller school footprints, 2 story buildings, shared facilities and adaptive re-use) to reduce the need for larger sites.

It is not clear to staff the type of planning process that was undertaken by LCPS, the additional sites evaluated, and the sets of criteria used for each new school facility, which determined no site was available that could meet plan policies. Although LCPS stated they undertook an extensive search of land for the western high school site at Fields Farm (SPEX 2006-0022), staff notes that locational criteria used by LCPS for high school facilities may differ from those used for new elementary and middle schools. For example, the minimal acreage required for an elementary school may be smaller than that required for a high school.

An alternative site or sites should be identified that meet plan policies. If it is determined through a joint planning process between LCPS and the County that no suitable sites for schools can meet existing plan policies, then a re-evaluation of those policies may be necessary in the context of a Comprehensive Plan Amendment.

Accessibility. LCPS states new schools are necessary to serve the growing student population in western Loudoun County and that road improvements are needed to provide adequate levels of safety. LCPS states that the road infrastructure is currently underdeveloped in western Loudoun County to serve existing traffic and every school site will require "unplanned" road improvements. While acknowledging that Routes 611 and 694 will require upgrades to serve the proposed schools on the subject site, LCPS states the existing conditions of the roadways (present alignment and existing topography), along with their close proximity to major travel ways (Routes 9 & 287), will afford good access from the northern portion of the County.

The County is committed to the preservation of the unpaved rural road network in its present state where possible. Paving and upgrading Routes 611 and 694 would not be consistent with the policies of both the Revised General Plan and the Countywide Transportation Plan for rural, unpaved roads. The subject site is located within an area that was not planned for the road infrastructure necessary to adequately serve the schools.

LCPS's Transportation Impact Analysis (TIA) demonstrated the need for several school-related road improvements to safely and adequately serve ES-25 and MS-10. The location of ES-25 and MS-10 on the subject site would exacerbate the background traffic improvements already needed (see Transportation section below). Constructing the schools would generate the need for unplanned road improvements, including the need for paving and improving Routes 611 and 694 to accommodate a school/staff population of over 2,400 students and an estimated 3,300 ADT's. Also, the additional vehicle trips generated by the impact of constructing two schools on the site would require the upgrading of unpaved rural roads within an area where the Revised General Plan's land use pattern supports lower densities in part to mitigate the additional costs that higher traffic volumes incur (Countywide Transportation Plan, text, p. 3-11). Lastly, road improvements for new school sites oftentimes require a considerable public investment to cover costs. As stated above, the placement of new school facilities in the Rural Policy Area at the focus of existing or planned communities can help to ensure that the County will take full advantage of the capital costs invested for road infrastructure improvements.

Bicycle and Pedestrian Access. Plan policies state that all public schools will be linked to adjacent neighborhoods by sidewalks or trails on both sides of roadways and crosswalks, and where possible, linked to greenways or trails (Revised General Plan, Policy 4, p. 3-10). Safe routes to school can be achieved by linking public schools to adjacent neighborhoods through sidewalks or trails on both sides of roadways and crosswalks (Revised General Plan, Policy 4, p. 3-10 and Bike/Ped Plan, text, p. 36). For multi-modal access to be most effective, school grounds and nearby developments need to provide safe accommodations (Bike/Ped Plan, text 3, p. 36).

The selection of a school site for ES-25 and MS-10 that is not located within or immediately adjacent to existing Towns, Villages, and JLMA's is in direct conflict with the locational policies contained within the Revised General Plan and the Bike/Ped Plan that call for safe routes to school, including linking public schools to adjacent neighborhoods by sidewalks or trails on both sides of roadways and crosswalks, and where possible, linked to greenways or trails, and providing greater commute options for students to walk or bike to school. LCPS states that the subject site will be safely served, will meet the projected needs of the growing western Loudoun County population, and that even within rural Towns, it is impractical to believe that students will be able to walk or bicycle to school, except from very limited and proximate home sites.

The impracticability of students walking or bicycling to school has, historically speaking, not always been the case. Even in rural Towns and Villages, school sites were often located to act as civic anchors within the community. Such locations meant that more children walked and bicycled to school. Almost 40 years ago, nearly 90% of children who lived within a mile of school used active transportation (i.e., walking or bicycling) as their primary mode of travel. Nearly half of all students walked or biked to school. Today, the number of students who walk or bike to school has dropped to approximately 15%. 20–

25% of morning traffic during the school year is parents driving kids to school⁵. The reasons for these statistics might be attributed to a rise in auto-dependent developments and the consolidation of schools into larger facilities a distance away from existing communities. Placing the schools a distance away from existing population centers means the County will support new school locations that: 1.) Are not integrated into the adjacent neighborhoods or sites located within or immediately adjacent to existing Towns, Villages, and JLMA's and 2.) Offer very little, if at all, potential commuting options for students and where instead most students will need to be bused or driven to school by their parents. These are in direct conflict with the existing school locational policies cited in both the Revised General Plan and the Bike/Ped Plan.

Site Design. The school buildings are located centrally within the subject site. The layout of the subject site will place the majority of the recreational fields adjacent to Route 611. The drainfield area along Route 694 and the eastern side of the subject site, along with the stream corridor to the north, provide significant open areas to the east, west, and north. To the south there will be a distance of approximately 200 feet between the proposed elementary school and the southern boundary of the site. The SPEX Plat also includes a limit of impact area boundary line along the tree save areas located adjacent to the spring house.

The SPEX Plat shows additional evergreen buffers for the most northern portion of the western boundary of the subject site. Due to the placement of the recreational fields adjacent to residential uses to the west, as well as adjacent to Route 611, staff is requesting LCPS agree to a condition to provide a continuous, enhanced buffer along the entire western boundary of the site to include a combination of evergreens and fencing. Staff also recommends the continuous, enhanced buffer be depicted on the SPEX Plat.

The SPEX Plat states that the athletic fields will not be lighted and that all site lighting shall be in conformance with Section 5-1504 of the Revised 1993 Zoning Ordinance. The Revised General Plan promotes the use of lighting for convenience and safety without nuisance associated with light pollution (Revised General Plan, text & Policy 1, p. 5-42). Staff recommends that LCPS agree to a condition that the athletic fields will not be lighted. In addition to providing on-site lighting in conformance with Section 5-1504 of the 1993 Revised Zoning Ordinance, staff requests LCPS agree to a condition that site building and parking lot lighting be designed and constructed with cut-off and fully-shielded fixtures so that light is directed inward and downward toward the interior of the property, and away from adjacent streets and properties.

The SPEX Plat depicts 1 soccer field and 1 softball field associated with the elementary school, and 2 soccer fields and 1 softball field associated with the middle school. Staff recommends that LCPS agree to condition the prohibition of any outdoor public address systems on all athletic fields.

⁵ Department of Health and Human Services, Center for Disease Control and Prevention, KidsWalk-to-School website, <http://www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm>.

Finally, staff notes the existence of a perennial stream that originates from a springhouse which, according to the hydrogeological evaluation by Traid Engineering, Inc. (see Environmental Review section below), the spring house and spring supplied water to a former residential structure (the property owner is cited in the report as stating that a former residence was located within this area but demolished in the 1970's). Due to its classification as a perennial stream and its overall contribution to the Catoctin Creek watershed, LCPS has agreed to protect and preserve the stream that originates from the spring by incorporating the stream and a 50-foot management buffer into the subject site's stream corridor resources. Furthermore, LCPS has agreed to restore the spring house.



GRAPHIC 3: VIEW OF THE SPRING HOUSE – LOOKING SOUTH

TRANSPORTATION

LCPS submitted a Traffic Impact Analysis (TIA), dated December 21, 2006, to determine potential traffic impacts associated with the opening of the two school facilities. Analyses were performed for the years 2012 (build out year for the elementary school) and for the 2022 (build out plus 10 years and includes the projected opening of MS-10 in 2015). The study was based on the estimated student population of 875 students for the elementary school and 1,350 students for the middle school. The study's methodology included basing the site-generated traffic volumes on an estimated 1,129 Average Daily Trips (ADT) for ES-25 and 2,187 ADT's for MS-10.

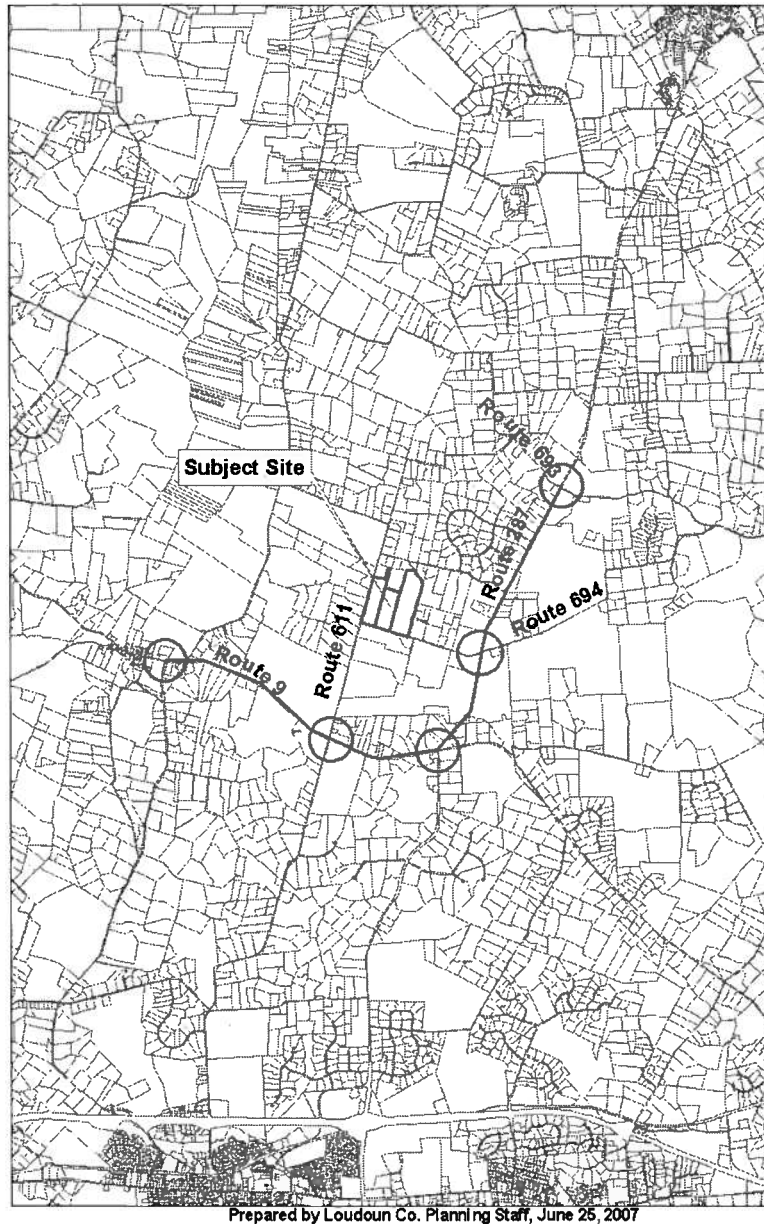
Staff notes that several improvements related solely to background traffic were identified in the TIA. LCPS has stated that they are not responsible for roadway improvements related to background traffic. Based on 2006 background traffic, the TIA identified unacceptable LOS at two signalized intersections along the Route 9 corridor. A LOS F for northbound movements at the a.m. and p.m. peak hours was identified at the intersection of Routes 9 and 690 along with LOS E and F for northbound and southbound traffic, respectively, for both peak hours at the intersection of Routes 9 and 287. Background traffic improvements, attributed to the 4% annual growth rate and consistent with the analysis years, are summarized in Table 1 below.

The TIA also estimated at 2012, the majority of ES-25 traffic entering the site from Route 287 will come from the north (45%) and from the west via Route 9 (40%). At 2022, the majority of MS-10 traffic entering the site from Route 287 will come from the north (35%) and from the east via Route 9 (30%). MS-10 traffic entering the site from Route 611 will come from the north (15%) and the west via Route 9 (15%). At this time, it is expected that the aforementioned 40% of ES-25 traffic entering the site from the west via Route 9 will be diverted from Route 287 to Route 611.

Table 1: Recommended Improvements Related to Background Traffic

LOCATION	RECOMMENDED IMPROVEMENT	YEAR REQUIRED
Route 9 @ Route 690	EB Right Turn Lane	2006
	WB Left Turn Lane	2006
	NB Right Turn Lane	2022
	Through Lane on Route 9	2022
Route 9 @ Route 287	SB Left Turn Lane	2006
	WB Right Turn Lane	2006
	Additional Through Lane on Route 9	2012
	NB Right Turn Lane	2012
	Through Lane on Route 287	2022
Route 9 @ Route 611	EB Left Turn Lane	2012
	WB Left Turn Lane	2012
	WB Right Turn Taper	2022
Route 9 Corridor	Through Lane	2022
Route 287 @ Route 694	NB Left Turn Lane	2022
	SB Left Turn Lane	2022
Route 287 @ Route 693	NB Left Turn Lane	2022
	SB Left Turn Lane	2022

Graphic 4: Intersections and Road Segments Analyzed



Based on the results of the TIA, the Virginia Department of Transportation, the Office of Transportation Services, and LCPS have agreed to phased roadway improvements to provide safe and adequate access to serve the two school facilities. Based on staff's comments, LCPS moved the proposed John Wolford entrance to the subject site further to the north to provide greater separation between the school entrance and the entrance to an existing single family home to the south. LCPS notes that the spacing distance meets

VDOT standards while providing safe and adequate access to the site. LCPS also agreed to provide a cul-de-sac at the northern terminus of existing Route 694. For Route 611, LCPS agreed to extend the paving from the proposed entrance to the boundary of the northern property line and to limit access to the site from Route 611 to emergency access only until all road improvements are completed prior to the opening of MS-10. LCPS verified that Routes 694 and 611 will need to be upgraded to incorporate 11 foot asphalt travel lanes, with appropriate ditch and shoulder improvements, and in accordance with VDOT standards. While LCPS believes that these roadway improvements can be accomplished within a 40 foot right-of-way (ROW), LCPS has agreed to provide any additional ROW and/or easements as necessary to accommodate the improvements. Finally, LCPS has agreed to provide signals when warranted at the Route 9 @ Route 611 intersection and the Route 287 @ Route 694 intersection, contingent upon VDOT approval.

The recommended and agreed upon road improvements, along with their phasing, are summarized in Table 2 below.

Table 2: Recommended Improvements Related to School Impacts

PHASE 1: PRIOR TO OPENING OF ES-25 (PROJECTED 2012)*	
LOCATION	RECOMMENDED IMPROVEMENT
Route 694	Provide ROW as needed for 11-foot asphalt travel lanes with adequate shoulders and ditches (Route 287 to the terminus of the public road)
Route 287 @ Route 693	NB Left Turn Lane
	SB Left Turn Lane
	Cul-de-sac turn around at the terminus of the public road
Route 287 @ Route 694	NB Left Turn Lane
	SB Right Turn Lane
	EB Right Turn Lane
	Signalization when warranted and contingent upon VDOT approval
PHASE 2: PRIOR TO OPENING OF MS-10 (PROJECTED 2015)	
LOCATION	RECOMMENDED IMPROVEMENT
Route 611	Provide ROW as needed for 11-foot asphalt travel lanes with adequate shoulders/ditches (Route 9 to the northern boundary of the site)
	Limiting access for emergency use only until MS-10 is open and all road improvements are installed
Route 611 @ Route 9	EB Left Turn Lane
	WB Right Turn Lane
	SB Right Turn Lane
	Signalization when warranted and contingent upon VDOT approval

* Access to the site from Route 611 will be restricted to emergency access only until all road improvements are completed prior to the opening of MS-10.

ZONING

The subject site is zoned AR-1 whereby a school (elementary, middle, or high) is permissible by special exception in the AR-1 zoning district pursuant to Table 2-102 of the Revised 1993 Zoning Ordinance. The SPEX Plat meets or exceeds the requirements of the AR-1 zoning district for lot coverage, building height, lot size, and lot width. The school facilities are one-story buildings at approximately 25 feet in height, although certain portions may reach up to 30 feet in height. The SPEX Plat also states that LCPS will meet or exceed the requirements of Section 5-1100 of the Revised 1993 Zoning Ordinance for parking.

In response to staff's comments, LCPS has made several revisions to the SPEX Plat including: 1.) Depicting the Scenic Creek Valley Buffer and the 50-foot management buffer associated with the floodplain, 2.) Providing a note on Sheet 1 stating that on-site water and wastewater facilities will serve only the proposed schools, 3.) Specifying on Sheet 2 the maximum square footage of all structures on the site, 4.) Adding the location of moderately steep slopes, and 5.) Depicting the right-of-way easement necessary for Route 611 (Purcellville Road) along with the 35 foot front yard adjacent to the easement.

Staff has requested LCPS provide details concerning the phasing of all improvements on the subject site and state a maximum square footage (including sewer treatment and water treatment facilities) to be provided during each phase. LCPS has revised the SPEX Plat to show phasing boundaries. Phase 1 will include the elementary school, associated recreational fields (one soccer field and one softball field), water and wastewater treatment facilities, and the Stormwater Management/Best Management Practices (SWM/BMP) pond. Phase 2 includes the middle school and associated recreational facilities (2 soccer fields and one softball field).

Along with the required front and side yards, the required 15-foot Type 2 buffer has been depicted on the SPEX Plat. LCPS has agreed to (and noted on the plat) an additional 15-foot wide buffer to enhance the Type 2 buffer (for a total of 30 feet in width) with landscaping to include an additional 6 trees per 100 lineal feet with a planting height of 6 to 8 feet. The enhanced buffer area includes that portion of the western boundary adjacent to Route 611 from the school entrance north to the limits of the major floodplain, and a portion of the eastern boundary from the terminus of Route 694 to the existing fencerow. LCPS has also depicted the enhanced buffer starting at the school entrance from Route 694 and extending along the south side of the internal drive for 300 feet, and surrounding the bus parking area located to the east of the proposed middle school.

While LCPS has complied with the majority of staff's comments, staff requests LCPS agree to a condition to construct the water and wastewater facilities, along with the SWM/BMP pond, in Phase 1 to safely and adequately service both school facilities. Staff

also notes LCPS did not specify the maximum square footage for the water and wastewater facilities on the SPEX Plat. The SPEX Plat states that the final size determination of both facilities will be determined at site plan stage. Staff requests LCPS provide a maximum square footage for both structures, as part of the overall square footage proposed for the site. The square footages should be stated on the SPEX Plat and the overall square footage should not exceed the maximum lot coverage allowed. Finally, staff has reviewed the application assuming lot consolidation of the three parcels and has requested LCPS commit to such a condition in conjunction with site plan submission and approval.

ENVIRONMENTAL REVIEW

1. Stream Corridor. Wetland Studies and Solutions, Inc. (WSSI) produced a wetland delineation report, dated April 25, 2006, that identified the boundaries of jurisdictional wetlands and other waters of the U.S. (i.e. streams and ponds) on the subject site. According to the report, an unnamed, perennial tributary of Catoctin Creek runs west to east across the northern portion of the site. A preliminary hydrogeologic evaluation prepared by Triad Engineering, Inc. and dated November 1, 2006, indicates that the central and northern portions of the subject site drain to this stream, which discharges to Catoctin Creek approximately 5 miles downstream. Wetlands are also present and associated with the tributary.



GRAPHIC 4: CATOCTIN CREEK TRIBUTARY AT THE NORTHERN PORTION OF THE SITE - LOOKING EAST FROM PURCELLVILLE ROAD

The Revised General Plan establishes stream corridor policies that reinforce the important role rivers and stream corridors play in protecting Loudoun County's water resources (*Revised General Plan, text, p. 5-5 & 5-12*). Stream corridor policies include the protection of rivers and streams, adjacent steep slopes, wetlands, forests, and historic, cultural and

archeological resources within the floodplain, and a 50-foot management buffer adjacent to the floodplain and steep slopes (*Revised General Plan, Policy 2, p. 5-6*).

County GIS records indicate the existence of a 100-year major floodplain associated with the stream. The limits of the floodplain are depicted on the SPEX Plat. The unnamed tributary of Catoctin Creek, wetlands, 100-year floodplain, and 50-foot management buffer comprise the site's stream corridor resources. Within the stream corridor, uses are limited to activities that will support and enhance the biological integrity and health of the river and stream corridor, including passive and active recreation, road crossings, pervious paths and trails, and agricultural activities (*Revised General Plan, Policy 18, p. 5-10*).



**GRAPHIC 5: SUBJECT SITE SHOWING BOUNDARIES OF
STREAM CORRIDOR RESOURCES**

LCPS has responded to staff's request to depict the 50-foot management buffer adjacent to the boundaries of the floodplain and its associated wetlands, to relocate the proposed SWM/BMP facility outside of the stream corridor, and to protect and preserve the stream that originates from the spring by incorporating a 50-foot management buffer and incorporating such buffer into the sites stream corridor resources. These changes have been depicted on the SPEX Plat. The plat proposes no disturbance to stream corridor resources, including the existing riparian corridor. LCPS has agreed to work with staff on

the development of a reforestation plan for the stream corridor to assist in preventing stream pollution and protecting the headwaters of the Catoctin Creek. In response to staff's request to provide a detailed floodplain study to improve the accuracy of flood hazard information for the approximate Zone A floodplain, LCPS provided a letter, dated May 30, 2007, from the Department of Building and Development approving a waiver of a detailed floodplain study per the requirements of the Facilities Standards Manual. The letter granting the waiver notes that the construction of the two school facilities proposes no crossing or encroachments of the floodplain and that construction areas will be located at significant distances from the floodplain.

2. Stormwater Management & Conservation. Significant improvements to infrastructure, including power and water supply, will be required to safely and adequately service ES-25 and MS-10. Staff has requested the schools consider conservation measures into site design to offset these long-term demands and impacts. Specifically, staff has asked LCPS to agree to applying measures that will achieve reduced water use, within the range of 20-40%, below current design assumptions. This range is consistent with the recommended range by the Leadership in Energy and Environmental Design (LEED) for Schools 2007 checklist and provides the flexibility needed for LCPS achieve its objective⁶. Water conservation design measures could include the universal use of low-flow toilets, waterless urinals, and harvesting of rainfall from rooftops for plumbing and/or irrigation needs. Furthermore, staff has requested LCPS investigate the possibility of applying geothermal design, and if feasible, agree to a condition that such a design be incorporated into the design of the school facilities. LCPS has not committed to measures that will meet specific targets for water use and energy reduction, but is reviewing potential options and will provide additional information prior to the Planning Commission's consideration of the application.

Based on staff's recommendation, LCPS has agreed to upgrade the proposed SWM/BMP facility located at the northwestern portion of the subject site, to an enhanced extended detention facility that treats stormwater runoff generated from the site with BMP's that achieve a 50% phosphorous removal efficiency. Staff recommends LCPS commit to BMP's that will treat all stormwater runoff generated from the site, as opposed to only the estimated 80% treated at the SMW/BMP facility, to achieve the 50% phosphorous removal efficiency (LCPS has noted that 80% of all stormwater runoff will drain to the SWM/BMP facility). LCPS has not committed to utilizing BMP's such as infiltration to treat all runoff from impervious surfaces (parking lots, internal roads, sidewalks, etc.).

HEALTH DEPARTMENT

LCPS proposes the use of on-site water and wastewater treatment facilities. Below are brief descriptions of each.

⁶ LEED for Schools is a green building rating system developed by the U.S. Green Building Council for K-12 schools and higher education buildings. The rating system is designed to improve children's health, productivity and learning capacity while also helping school building to be more energy efficient and resource friendly (Source: U.S. Green Building Council website, www.usgbc.org).

Water Supply. A preliminary hydrogeologic evaluation completed by Triad Engineering, Inc., dated November 1, 2006, was submitted by LCPS. The report estimated that an annual usage of 4 million gallons per year was needed to serve both schools. The groundwater target yield is projected at 58.5 gallons per minute (gpm). The evaluation provided a general assessment of groundwater quantity and quality and included a fracture trace analysis that identified potential locations for high yield well sites. Well sites have been identified on the SPEX Plat. A water budget was also developed by comparing the anticipated annual groundwater withdrawal to the estimated annual groundwater recharge. Based on a budget that assumes recharge from only precipitation (not including off-site and on-site groundwater recharge) at drought conditions, the preliminary evaluation estimates that recharge will exceed the estimated annual usage cited above. The evaluation also concluded that: 1.) High yield wells are feasible at the site, and 2.) Target well depths are likely to be prevalent at depths shallower than 500 feet but may be as great as 1,000 feet. A Phase 1 Environmental Site Assessment (ESA) did not find any evidence of environmental contaminations (a former sewage disposal system associated with the former residence should be abandoned) and the evaluation recommended the location of any proposed water supply wells should adhere to 100-foot setback requirements from proposed drainfields. Finally, the evaluation states that groundwater drawdown and recovery tests will be conducted to evaluate the potential impacts of proposed groundwater extraction to these sensitive receptors.

Since the completion of the preliminary hydrogeologic evaluation, LCPS has installed groundwater test wells on the site and at least two 48-hour pump tests were conducted to determine any potential impacts to groundwater extraction. Operational wells on several surrounding properties were also monitored for any potential impacts. As of the filing of this report, a detailed hydrogeological study that includes the results of the groundwater pump tests has not been submitted. Staff is requesting LCPS agree to a condition that final approval of water facility design be required prior to site plan approval.

Wastewater. A Preliminary Engineering Evaluation, dated August 31, 2006, was completed by Greenway Engineering for wastewater treatment. Based on an estimated combined student and staff population of 2,475 individuals, the wastewater treatment system design is based on a daily peak flow of 33,750 gallons per day (gpd). The drain fields have been sized for a gpd flow of 24,107 over a 7-day period. The evaluation recommends that each kitchen be plumbed separately from the main sewer system with a properly sized grease trap provided. Under a secondary treatment system, the treated effluent will be pumped to three sections of drainfields, located in the eastern section of the site and adjacent to Route 694, for subsurface dispersal.

The department has met twice with the State Health Department to review proposed wastewater treatment facility design and noted that additional design information will be required prior to site plan approval. LCPS revised the boundaries of the drainfield sites on the SPEX Plat. Staff also notes that Drainfield Site #3 depicted on the SPEX Plat is near an existing well located on the Planck property, but is located at least 100 feet from the off-

site well. The Health Department can support the application provided LCPS agree to lot consolidation of the three parcels prior to the issuance of a septic permit, that any corrections or additions requested at the State or Local level for wastewater treatment facility design be completed prior to site plan approval, and that all GMP 101 requirements related to drainfields be completed prior to permit issuance.

PARKS, RECREATION, AND COMMUNITY SERVICES

The Department of Parks, Recreation and Community Services (PRCS) notes that the Loudoun County School Board has helped maintain a collaborative relationship with the agency that allows use of certain school facilities for recreational and community programs, a relationship that the PRCS hopes will continue. The department also noted that recreational facilities such as playgrounds and tracks are not part of the original program or funding of schools. The Department requested LCPS consider the location of these future site amenities for ES-25, provided they do not compromise the proposed ballfields. LCPS has offered to take this recommendation into consideration.

FIRE AND RESCUE

The Department of Fire, Rescue and Emergency Management initially recommended LCPS consider a semicircle drive similar to the current configuration of the Lovettsville Elementary School to allow better access and flow of emergency vehicles through the site. In response, LCPS stated the current loop depicted on the SPEX Plat will provide greater space for bus stacking. If the loop were changed to a semicircle, it would only allow for approximately 9 buses to stack along the curb, as opposed to 17 buses with the current design. The department has concurred with the response from LCPS and supports the current design.

TOWN OF PURCELLVILLE

The Town of Purcellville provided comments to the County regarding the application and asked several questions. The Town asked if it was too soon to pursue approval for a commission permit given the weakness in the residential real estate market potentially resulting in slower student population growth and the projected 5 year opening date for ES-25. LCPS has stated the planning process for any school site typically requires 4 years from start to completion. According to LCPS, potential site identification, acquisition, negotiation, and site feasibility can take a year, time is needed to prepare the land development applications and the review and approval of such applications can take a minimum of 8 months to as long as 2 years.

The Town of Purcellville also questioned whether the site had been evaluated for a high school, as several factors make it conducive to a high school site, including timing, size, and location to a primary road and the HS-3 attendance zone. In response, LCPS noted that the site for HS-3 at Fields Farm has already been identified. Since that time, the BOS approved SPEX 206-0022, Western High School, as the site for the new HS-3 high school.

Finally, the Town requested that referrals be sent to Round Hill and Hamilton and that a copy of the TIA be sent to the Town of Purcellville to evaluate the traffic impacts south of the proposed schools. In response, LCPS stated that the Towns of Purcellville, Round Hill, and Hamilton are located within the anticipated service area for ES-25 and MS-10. A copy of the TIA was forwarded to the Town of Purcellville on April 2, 2007. The TIA was forwarded to the Town's traffic consultant for review. According to LCPS, the consultant found the study to be in accord with the scoping letter and noted that should the school boundaries change, there may be traffic impacts to the Town of Purcellville and areas south.

Community Meetings. LCPS held two community meetings – the first at Hillsboro Elementary School on May 18, 2007 and the second at Lovettsville Elementary School on June 13, 2007. Between 50 and 70 people were in attendance for each meeting. Several comments and questions were raised, including the criteria and the process used by LCPS in their selection of the Grubb site as the most suitable site for ES-25 and MS-10, LCPS's condemnation policies, the impact traffic and groundwater uptake for the two school facilities will have on neighboring properties, and why Lovettsville has not been considered further for a new school cluster.

D. ZONING ORDINANCE CRITERIA FOR APPROVAL

Section 6-1310 of the Revised 1993 Loudoun County Zoning Ordinance states "In considering a special exception application the following factors shall be given reasonable consideration."

(A) Whether the proposed special exception is consistent with the comprehensive plan.

The location of ES-25 and MS-10 is not consistent with the comprehensive plan. The policy for the location of new school facilities is part of a larger growth management strategy for western Loudoun County that directs and supports concentrated residential, non-residential, public infrastructure, and public facility investments within or immediately adjacent to existing Towns, Villages, and JLMA's. The subject site is located approximately 3.5 miles from the Town of Hillsboro and 5.3 miles from the Town of Lovettsville. The proposed schools, with a combined student/staff population of over 2,400 individuals, would not be compatible with planned land uses that call for low-density residential at a base density of 1 dwelling unit per 20 acres and/or for rural economy uses. The subject site is located within an area surrounded by low-density residential to the north, east and west. Low-density residential and agriculture land lies to the south of the subject site and south of John Wolford Road.

(B) Whether the proposed special exception will adequately provide for safety from fire hazards and have effective measures of fire control.

The proposed schools will be constructed to meet required building safety codes, including the provision of a sprinkler system. Fire protection services will be provided by the volunteer fire companies serving the area. Initial access to the site will be from Route 287 via John Wolford Road with added access from Route 9 via Route 611 when the middle school is constructed. Until the middle school is constructed, emergency access from Route 9 via Route 611 will be provided.

- (C) Whether the level and impact of any noise emanating from the site, including that generated by the proposed use, negatively impacts the uses in the immediate area.**

The proposed schools, with a combined student/staff population of over 2,400 individuals, and associated recreational facilities, would not be compatible with planned land uses that call for low-density residential at a base density of 1 dwelling unit per 20 acres and/or for rural economy uses. The subject site is located within an area surrounded by low-density residential to the north, east and west. Low-density residential and agriculture land lies to the south of the subject site and south of John Wolford Road.

- (D) Whether the glare or light that may be generated by the proposed use negatively impacts uses in the immediate area.**

Lighting for the schools will be provided for visibility in the parking areas and around the school buildings for safety and security purposes. The ball fields will not be lighted. Lighting will be cutoff and shielded, directed inward and downward toward the interior of the property. Development of the property will comply with the lighting standards of Section 5-1504.

- (E) Whether the proposed use is compatible with other existing or proposed uses in the neighborhood, and adjacent parcels.**

Reference C above.

- (F) Whether sufficient existing or proposed landscaping, screening and buffering on the site and in the neighborhood will adequately screen surrounding uses.**

Reference A, C, and E above.

- (G) Whether the proposed special exception will result in the preservation or destruction, loss or damage of any topographic or physical, natural, scenic, archaeological or historic feature of significant importance.**

The site is predominantly an open agricultural field with wooded fencerows and a stream corridor that includes an unnamed tributary to the Catoctin Creek, wetlands, steep slopes, riparian buffer, and a 50-foot management buffer. The proposed development of the property will retain the tree line along the southern boundary and the tree line along the floodplain in the northeastern portion of the site. The Phase 1 Archeological Investigation

identified a potential archeological site in the northeastern portion of the property. Development of the property will be avoided within the stream corridor and archeological site.

(H) Whether the proposed special exception will damage existing animal habitat, vegetation, water quality (including ground water) or air quality.

No damage to animal habitat, vegetation, or air quality is anticipated. The property has been farmed for a number of years and is in open farm fields. The Rare and Endangered Species analysis of the site found low probability for any rare or endangered species. However, the development of the two school facilities and the necessary increase in infrastructure needed to serve the schools could have impact on water quality. A SWM/BMP enhanced extended-detention facility will be constructed to handle stormwater run-off with a commitment to achieve a minimum 50% phosphorous removal efficiency. The school will utilize on-site water and wastewater systems which will be constructed and maintained in accord with the requirements of the Health Department and LCSA.

(I) Whether the proposed special exception at the specified location will contribute or promote the welfare or convenience of the public.

Staff recommends an alternative site or sites be identified that meet plan policies. The subject site is located within an area that is not planned for the road infrastructure necessary to adequately serve schools, paving and upgrading these roads would not be consistent with the policies of both the Revised General Plan and the Countywide Transportation Plan for rural, unpaved roads, the selection of a school site for ES-25 and MS-10 cannot achieve greater commuter options for students and the location is not consistent with the larger growth management strategy for western Loudoun County contained with the Revised General Plan that directs and supports concentrated residential, non-residential, public infrastructure, and public facility investments within or immediately adjacent to existing Towns, Villages, and JLMA's.

(J) Whether the traffic expected to be generated by the proposed use, will adequately be served by roads, pedestrian connections and other transportation services.

The Revised General Plan's land use pattern in the Rural Policy Area supports lower densities in part to mitigate the additional costs that higher traffic volumes incur. The subject site is located within an area that is not planned for the road infrastructure necessary to adequately serve schools. Paving and upgrading these roads would not be consistent with the policies of both the Revised General Plan and the Countywide Transportation Plan for rural, unpaved roads. Furthermore, the selection of a school site for ES-25 and MS-10 that is not located within or immediately adjacent to existing Towns, Villages, and JLMA's is in direct conflict with the locational policies contained within the Revised General Plan and the Bike/Ped Plan that call for safe routes to school, including linking public schools to adjacent neighborhoods by sidewalks or trails on both sides of

roadways and crosswalks, and where possible, linked to greenways or trails, and providing greater commute options for students to walk or bike to school.

- (K) Whether, in case of existing structures to be converted to uses requiring a special exception, the structures meet all code requirements of Loudoun County.**

Not applicable.

- (L) Whether the proposed special exception will be served adequately by essential public facilities and services.**

Police protection will be provided by Loudoun County and Fire and Rescue Services will be provided by the volunteer system and the County.

- (M) The effect of the proposed special exception on groundwater supply**

A preliminary hydrogeologic evaluation completed by Triad Engineering, Inc., dated November 1, 2006, was submitted by LCPS. The evaluation provided a general assessment of groundwater quantity and quality and outlined potential high yield well sites on the subject site. Based on a budget that assumes recharge from only precipitation (not including off-site and on-site groundwater recharge) at drought conditions, the preliminary evaluation estimates that recharge will exceed the estimated annual usage. A Phase 1 Environmental Site Assessment (ESA) did not find any evidence of environmental contaminations. A detailed hydrogeologic study that includes groundwater drawdown and recovery tests, however, has not yet been completed to evaluate the potential impacts of proposed groundwater extraction on the site and neighboring properties.

- (N) The effect of the proposed special exception on the structural capacity of the soils.**

Construction in compliance with the County's Facilities Standards Manual will ensure adequate structural capacity is maintained for the proposed use.

- (O) Whether the proposed use will negatively impact orderly and safe road development and transportation.**

Reference A, C, E, I, and J above.

- (P) Whether the proposed special exception use will provide desirable employment and enlarge the tax base by encouraging economic development activities consistent with the Comprehensive Plan**

The proposed elementary school will provide approximately 90 jobs and the middle school will provide approximately 140 jobs.

(Q) Whether the proposed special exception considers the need of agriculture, industry, and businesses in future growth.

Reference P above.

(R) Whether adequate on and off-site infrastructure is available

Reference A, C, E, I, and J above.

(S) Any anticipated odors which may be generated by the uses on site

No odors are anticipated from the proposed uses on the site.

(T) Whether the proposed special exception uses sufficient measures to mitigate the impact of construction traffic on existing neighborhoods and school areas.

Reference A, C, E, I, and J above.

V. ATTACHMENTS		PAGE NUMBER
1. Review Agency Comments		
a. Planning Department, Community Planning	(6/12/2007, 3/23/2007)	A-1
b. Building & Development, Zoning Administration	(5/18/2007, 2/27/2007)	A-27
c. Building & Development, Environmental Review Team (ERT)	(5/11/2007, 4/5/2007)	A-33
d. Office of Transportation Services (OTS)	(5/11/2007, 2/12/2007)	A-37
e. Virginia Department of Transportation (VDOT)	(5/18/2007, 3/16/2007)	A-43
f. Loudoun County Health Department, Environmental Health	(5/4/2007, 1/24/2007)	A-47
g. Department of Parks, Recreation and Community Services	(5/5/2007)	A-51
h. Fire and Rescue Services	(5/21/2007, 2/20/2007)	A-53
i. Town of Purcellville	(3/13/2007)	A-57
2. Disclosure of Real Parties in Interest	(6/11/2007)	A-59
3. Applicant's Statement of Justification	(4/27/2007)	A-81
4. Applicant's Response to Referral Agency Comments	(6/11/2007, 4/27/2007)	A-91
5. Community Information Meeting Notices	(6/13/2007, 5/16/2007)	A-119
6. Copy Tests – CMPT 2006-0009 Timeline Extension		A-121
7. Special Exception Plat	(6/14/2007)	Follows A-122